

Translation

PATENT COOPERATION TREATY

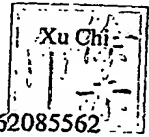
PCT

PCT Application
PCT/CN2004/00111



INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference IEC040039PCT		FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/CN2004/001188		International filing date (day/month/year) 20.Oct. 2004 (20.10.2004)	Priority date (day/month/year) 22.Oct. 2003 (22.10.2003)
International Patent Classification (IPC) or national classification and IPC See supplemental box			
Applicant KUMING INSTITUTE OF BOTANY, THE CHINESE ACADEMY OF SCIENCES ET AL.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 31. Mar. 2005(31.03.2005)		Date of completion of this report 12. Jan. 2006 (12.01.2006)	
Name and mailing address of the IPEA/CN The State Intellectual Property Office, the P.R.China, 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088 Facsimile No. 86-10-62019451		Authorized officer  Telephone No. (86-10)62085562	

Box No. I Basis of the report

1. With regard to the language, this report is based on:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rules 12.3(a) and 23.1(b))
- ☐ publication of the international application (Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages _____ as originally filed/furnished
- pages * _____ received by this Authority on _____
- pages * _____ received by this Authority on _____
- ☐ the claims:
- pages _____ as originally filed/furnished
- pages * _____ as amended (together with any statement) under Article 19
- pages * _____ received by this Authority on _____
- pages * _____ received by this Authority on _____
- ☐ the drawings:
- pages _____ as originally filed/furnished
- pages * _____ received by this Authority on _____
- pages * _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

This questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 10

because:

☒ the said international application, or the said claims Nos. 10

relate to the following subject matter which does not require an international preliminary examination(*specify*):

The invention set forth in Claim 10 relates to a method for treatment of the human body by therapy.

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. _____ are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. _____ are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. _____

☐ a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

☐ furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Preliminary Examining Authority in a form and manner acceptable to it.

☐ furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Preliminary Examining Authority in a form and manner acceptable to it.

☐ pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rules 13ter.1(a) or (b) and 13ter.2.

☐ a meaningful opinion could not be formed without the tables related to the sequence listings; the applicant did not, within the prescribed time limit, furnish such tables in electronic form complying with the technical requirements provided for in Annex C-bis of the Administrative Instructions, and such tables were not available to the International Preliminary Examining Authority in a form and manner acceptable to it.

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in electronic form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ See Supplemental Box for further details.

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement:**

Novelty (N)	Claims <u>1-9</u>	YES
	Claims _____	NO
Inventive step (IS)	Claims <u>1-9</u>	YES
	Claims _____	NO
Industrial applicability (IA)	Claims <u>1-9</u>	YES
	Claims _____	NO

2. Citations and explanations (Rule 70.7)

The following documents have been cited herein:

Document1: Chemical Abstracts 124:170144, &Buchanan, Malcolm S et al., Phytochemistry,1996, Vol. 41, No. 3, p.821-8

Document2: Chemical Abstracts 124:312276, &Buchanan, Malcolm S et al., Phytochemistry,1996, Vol. 41, No. 1, p.173-6

Document3: Chemical Abstracts 123:250780, &Buchanan, Malcolm et al., Phytochemistry,1995, Vol. 40, No. 1, p.135-40

Document4: Chemical Abstracts 122:128214, &Hashimoto, Toshihiro et al., Chem. Pharm. Bull,1994, Vol. 42, No. 7, p.1528-30

Document 1-4 described many compounds isolated from *Daldivia* sp.. However, these compounds disclosed in above documents are different from a compound of formula (I) set forth as claim 1 of this application. Moreover, D1-4 neither teach nor suggest the compounds of the claim 1 having benzofuran lactone skeleton and the use thereof.

Thus, claim 1 is novel and not obvious from the description in those documents, meeting the criteria of novelty step set out in PCT Article 33(2) and inventive step set out in PCT Article 33(3).

In term of above, claims 2-9 meet the criteria of novelty set out in PCT Article 33(2) and inventive step set out in PCT Article 33(3).

Claims 1-9 meet the criteria of Industrial applicability set out in PCT Article 33(4).

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: International Patent Classification (IPC) or national classification and IPC

C07D493/04 (2006.01) i

A61K 31/365 (2006.01) i

A61P 31/18 (2006.01) i